Table 9. Civilian Unemployment Rates by Age, 1996-2000

Age Group	United States	Canada	Australia	Japan	France (1)	Germany (2)	Italy	Sweden	United Kingdom (1)
				1996					
All working ages	5.4	8.7	8.6	3.4	12.6	8.9	11.7	9.9	8.2
Under 25 years	12.0	14.3	15.7	6.7	27.8	9.4	34.5	21.4	14.7
Teenagers (3)	16.7	18.4	20.8	9.3	32.1	7.7	40.9	22.8	17.8
20-24 years	9.3	12.0	12.3	6.2	27.1	10.1	32.4	21.0	13.0
25 years and over	4.2	7.6	6.7	2.9	10.8	8.9	8.4	8.5	6.9
				1997					
All working ages	4.9	8.2	8.6	3.4	12.8	9.9	11.9	10.1	7.1
Under 25 years	11.3	15.3	16.3	6.7	29.3	10.5	34.2	21.4	13.5
Teenagers (3)	16.0	20.4	20.6	9.3	33.7	8.7	41.0	24.5	NA
20-24 years	8.5	12.4	13.4	6.2	28.5	11.3	32.7	20.4	NA
25 years and over	3.8	6.9	6.6	3.0	11.0	9.8	8.7	8.7	5.9
,				1998					
All working ages	4.5	7.5	8.0	4.1	12.2	9.4	12.0	8.4	6.1
Under 25 years	10.4	14.4	15.2	7.8	26.5	9.7	34.1	17.2	12.3
Teenagers (3)	14.6	19.5	20.0	10.9	NA	8.3	41.7	21.2	NA
20-24 years	7.9	11.5	11.9	7.2	NA	10.4	31.9	15.9	NA
25 years and over	3.4	6.3	6.2	3.6	10.7	9.4	8.9	7.3	5.0
•				1999					
All working ages	4.2	6.8	7.2	4.7	NA	NA	11.5	7.1	NA
Under 25 years	9.9	13.2	13.9	9.2	NA	NA	33.1	14.6	NA NA
Teenagers (3)	13.9	17.5	18.5	12.8	NA	NA	40.7	18.8	NA
20-24 years	7.5	10.6	10.6	8.5	NA	NA	31.1	13.0	NA
25 years and over	3.1	5.6	5.6	4.1	NA	NA	8.8	6.2	NA
20 yours and over		0.0	0.0	2000			0.0	0.2	
All working ages	4.0	5.8	6.6	p4.8	NA	NA	NA	NA	NA
All working ages					NA NA	NA NA	NA NA	NA NA	NA NA
Under 25 years	9.3	11.2 14.8	12.6	p9.3	NA NA		NA NA	NA NA	
Teenagers (3)	13.1	-	17.0	p12.3		NA			NA
20-24 years	7.1 3.0	9.1 4.8	9.5 5.1	p8.6	NA NA	NA NA	NA NA	NA NA	NA NA
25 years and over	3.0	4.8	5.1	p4.2	INA	INA	INA	Avi	NA

NA = Not available.

p = Preliminary.
(1) Data are for the Spring.

 ⁽²⁾ Unified Germany.
 (3) 16-to 19-year-olds in the United States, Canada, France, Sweden and the United Kingdom; 15-to 19-year-olds in Australia, Japan, and Italy.

GENERAL NOTES

This document presents selected international labor force statistics for 10 countries -- the United States, Canada, Australia, Japan, and six European countries. Data for all 10 countries are shown on most tables. (Tables 3 and 9 exclude the Netherlands.) Unless otherwise noted, the data are adjusted to U.S. concepts.

NOTE ON JAPAN. In Japan, Special Labor Force Surveys conducted in February or March ask more probing questions than the regular monthly surveys and, therefore, provide a better basis for adjustment to U.S. concepts. These additional adjustments have a small effect on the rates for both sexes combined but a substantial effect on unemployment rates by sex. Therefore, while the additional information from the special surveys is not used to adjust the total unemployment rate, it is used to adjust the Japanese rates by sex (Table 8). It should be noted that adjustment factors from one month may not be fully indicative of the adjustment factors for the entire year. For further information, see Sara Elder and Constance Sorrentino, "Japan's Low Unemployment: A BLS Update and Revision," Monthly Labor Review, October 1993, pp. 56-63.

NOTE ON ADJUSTMENTS: The foreign country data are adjusted as closely as possible to U.S. concepts, with the exception of age limits and the treatment of layoffs, for which no adjustments are made. In addition, for some countries, no adjustment is made for deviations from U.S. concepts in the treatment of unpaid family workers, persons waiting to start a new job, and passive job seekers (for example, persons only reading newspaper ads as their method of job search). In the United States, job search must be "active," such as placing or answering advertisements, and simply reading ads is not enough to qualify as active search.

Except for the inclusion of passive job seekers in Canada, these "unadjusted" differences are believed to have a negligible effect on the comparisons. For Canada, see note on breaks in series. For further information on comparability issues, see Constance Sorrentino, "International unemployment rates: how comparable are they?" Monthly Labor Review, June 2000, pp. 3-20.

For most countries, the adjusted rates are close to or identical to the published rates. However, there are major differences for four countries: Canada, Germany, Sweden, and the United Kingdom. For Germany and the United Kingdom, the national published unemployment rates are based on employment office data rather than labor force surveys. These administrative data overstate the unemployment rate for Germany relative to labor force survey data according to U.S. concepts, and they understate the United Kingdom's unemployment rate relative to labor force survey data according to U.S. concepts. In Germany, administrative data include a significant number of persons who have "marginal" jobs but are looking for other jobs or additional work. Such persons are not counted as unemployed in a labor force survey. In addition, the national rate for Germany is based on the wage and salary labor force rather than the total labor force, also causing overstatement of the rate according to U.S. concepts. In the United Kingdom, the official unemployment rate is based on the count of claimants for unemployment benefit. Only jobless persons are included in the claimant count, which is more restrictive than a full registration count. For Canada and Sweden, see explanations below.

BREAKS IN SERIES: There are breaks in the data series for the United States (1990, 1994, 1997, 1998, 1999, 2000), Canada (1966, 1976), and the adjusted series for Canada (1976), France (1992), Germany (1983, 1991), Italy (1986, 1991, 1993), the Netherlands (1983, 1988), and Sweden (1987, 1993). Canada's data have been adjusted for the 1966 break back to 1959. Sweden's data have been adjusted for the 1993 break back to 1987. No adjustments have been made for the other breaks in series.

The United States. While current survey concepts and methods are very similar to those introduced at the inception of the Current Population Survey in 1940, a number of changes have been made over the years to improve the accuracy and usefulness of the data. Other changes, such as introduction of new population controls from the decennial censuses, also affect historical comparability. Most of these changes have had small effects on historical comparability. However, the 1990 and 1994 breaks noted here reflect major changes.

In 1994, a major redesign of the labor force survey questionnaire and collection methodology was introduced. Revised population estimates based on the 1990 Census, adjusted for the estimated undercount, were also incorporated. In 1996, previously published data for the 1990-1993 period were revised to reflect the 1990 census-based population controls, adjusted for the undercount. Therefore, data for 1994 onward are not directly comparable with data for 1993 and earlier years because of the redesign, and data for 1990 onward are not directly comparable with data for 1989 and earlier years because of the introduction of the 1990 census-based population controls, adjusted for the undercount. The estimated effect of the introduction of the population controls, adjusted for the undercount, was to raise 1990 employment by 879,000 and raise the overall unemployment rate by 0.1 percentage point. The redesign effect cannot be precisely determined for employment, but it has been estimated to raise the overall unemployment rate by 0.1 percentage point.

In 1997, revised population controls were introduced into the household survey. The introduction of these controls results in an increase in the population and labor force estimates and represents a break in series with data prior to January 1997. The revised controls result in an increase of 470,000 in the January 1997 estimate of the population 16 years and over. The labor force and employment levels were increased by about 320,000 and 290,000, respectively. Unemployment rates and other percentages of labor market participation were virtually unaffected by the revisions.

In 1998, new composite estimation procedures and minor revisions in population controls were introduced into the household survey. The new procedures produce somewhat lower estimates of the civilian labor force and employment and slightly higher estimates of the level of unemployment. Unemployment rates and other percentages of labor market participation were not significantly affected. With the introduction of revised population controls, estimates of most unemployment rates and other percentages of labor market participation were unaffected.

In 1999, revisions were introduced in the population controls used in the household survey. The introduction of these controls results in an increase in the estimated population and labor force levels and represents a break in series with data for prior years. The revised controls result in an increase of 310,000 in the December 1998 estimate of the population 16 years and over. The labor force and employment levels were increased by about 60,000 each. The population revisions had negligible impact on unemployment rates and other percentages of labor market participation.

In 2000, revisions were introduced in the population controls used in the household survey. The introduction of these controls results in a decrease in the estimated population and labor force levels and represents a break in series with data for prior years. In many cases, however, the break is inconsequential. The revised controls result in a decrease of 217,000 in the December 1999 estimate of the population 16 years and over. The labor force and employment levels were decreased by about 123,000 and 117,000, respectively. The population revisions had a negligible impact on unemployment rates and other percentage estimates.

Canada. The 1966 break reflects a change in the definition of the labor force. BLS has adjusted the Canadian data for this break based on 1966 ratios of the revised data to the old series.

In 1976, there are breaks in both the approximating U.S. concepts series and the as published series. Beginning in 1976, Canadian data are adjusted to more closely approximate U.S. concepts. Adjustments are made to exclude: (1) 15 year olds; (2) passive job seekers; (3) persons waiting to start a new job who did not seek work in the past four weeks; and (4) those unavailable for work due to personal or family responsibilities. An adjustment is made to include full-time students looking for full-time work. The impact of the adjustments was to lower the annual average unemployment rate by 0.1-0.4 percentage points in the 1980's and 0.4-1.0 percentage points in the 1990's. Statistics Canada has provided BLS with all adjusted data. For further information, see Constance Sorrentino, "International unemployment rates: how comparable are they?" Monthly Labor Review, June 2000, pp. 3-20.

In Tables 6 and 7, the data are those published by Statistics Canada because adjusted data were not available.

The 1976 break in the as published data reflects the incorporation of 1996 Census results and a new method of estimation. The impact of these changes was a downward revision of the population estimates in 1976 and the size of the revision has increased gradually over time. Revisions to the levels of employment and unemployment have also decreased. Estimates of the unemployment rate have been little changed (in half of the years covered, the unemployment rate remained unchanged). The revisions to data by economic sector are available beginning in 1987. Therefore, several data series in Tables 6 and 7 are "not available" for 1976-86.

France. The 1992 break reflects the substitution of standardized European Union Statistical Office (EUROSTAT) unemployment statistics for the unemployment data estimated according to the International Labor Office (ILO) definition and published in the Organization for Economic Cooperation and Development (OECD) annual yearbook and quarterly update. This change was made because the EUROSTAT data are more up-to-date than the OECD's figures. Also, since 1992, the EUROSTAT definitions are closer to the U.S. definitions than they were in prior years. The impact of this revision was to lower the unemployment rate by 0.1 percentage point in 1992 and 1993, by 0.4 percentage point in 1994, and by 0.5 percentage point in 1995. There is no 1992 break in series for the employment data. The 1993 break for the employment data by economic sector (Tables 6 and 7) reflects a change in the classification system used to delineate sectors.

<u>Germany.</u> The 1983 break reflects the replacement of labor force survey results tabulated by the national statistical office with those tabulated by EUROSTAT. The impact of the change was to lower the adjusted unemployment rate in 1983 by 0.3 percentage point from 7.2 to 6.9 percent.

The 1991 break reflects the introduction of comparative labor force measures for unified Germany. Data for years prior to 1991 relate to the former West Germany. The impact of including the former East Germany was to increase the unemployment rate from 4.3 to 5.6 percent in 1991.

The German Statistical Office has not made revisions to data by economic sector for the years 1971-1979. Consequently, several data series on Germany in Tables 6 and 7 are "not available" for those years.

<u>Italy.</u> The 1986 break reflects a change in the survey questionnaire resulting in a significant increase in the number of people reported as seeking work in the past 30 days. The impact was to increase the Italian unemployment rate approximating U.S. concepts by 1.2 percentage points in 1986, from 6.3 to 7.5 percent.

In 1991, the method of weighting sample data was revised. The impact was to increase the unemployment rate by approximately 0.3 percentage point, from 6.6 to 6.9 percent in 1991.

In July 1999, the labor force survey estimates for October 1992 onward were revised to incorporate new estimation procedures and more accurate population data. The impact of these changes was an upward revision of employment and a downward revision in unemployment and the unemployment rate. BLS shows a break in series beginning with the 1993 data. The impact of these changes was to lower Italy's adjusted unemployment rate by approximately 0.1-0.4 percentage points, with larger revisions occurring in more recent years. In 1997, the adjusted unemployment rate decreased from 12.3 to 11.9 percent and in 1998 from 12.3 to 12.0 percent.

Netherlands. The 1983 break reflects the replacement of labor force survey results tabulated by the national statistical office with those tabulated by EUROSTAT. The Dutch figures for 1983 onward also reflect the replacement of man-year employment data with data from the Dutch Survey of Employed Persons. The impact of the changes was to lower the adjusted unemployment rate by about 2 percentage points in 1983. In 1992, a new survey questionnaire was introduced that allowed for a closer application of ILO guidelines. EUROSTAT has revised the Dutch series back to 1988 based on the 1992 changes. The 1988 revised unemployment rate is 7.7 percent; the previous figure for 1988 was 9.3 percent.

The data published by the Dutch statistical agency as shown in Table 2 contain two breaks in series for both employment and unemployment. The 1987 break in employment reflects the introduction of the new continuous labor force survey which began that year. The 1992 break in employment reflects changes in the labor force survey definitions. The 1975 break in unemployment reflects a change in the enumeration of the registered unemployed. Beginning in 1988, the unemployment figures are based on a combination of registration data provided by the public employment offices and data from the labor force survey.

Sweden. There have been two breaks in series in the Swedish labor force survey, in 1987 and 1993. Adjustments have been made for the 1993 break back to 1987. In 1987, a new questionnaire was introduced. Questions regarding current availability were added and the period of active workseeking was reduced from 60 days to 4 weeks. These changes lowered Sweden's 1987 unemployment rate by 0.4 percentage point, from 2.3 to 1.9 percent. In 1993, the measurement period for the labor force survey was changed to represent all 52 weeks of the year rather than one week each month and a new adjustment for population totals was introduced. The impact was to raise the unemployment rate by approximately 0.5 percentage point from 7.6 to 8.1 percent. Statistics Sweden revised its labor force survey data for 1987-1992 to take into account the break in 1993. The adjustment raised the Swedish unemployment rate by 0.2 percentage point in 1987 and gradually rose to 0.5 percentage point in 1992.

Beginning with 1987, BLS has adjusted the Swedish data to classify students who also sought work as unemployed. The impact of this change was to increase the adjusted unemployment rate by 0.1 percentage point in 1987 and by 1.8 percentage points in 1994, when unemployment was higher. In 1999, the national unemployment rate was adjusted from 5.6 to 7.1 percent due to the inclusion of students.

The net effect of the 1987 and 1993 changes and the BLS adjustment for students seeking work lowered Sweden's 1987 unemployment rate from 2.3 to 2.2 percent.

<u>POPULATION COVERAGE:</u> Data relate to the civilian noninstitutionalized working age population, except that the institutionalized working age population is included in Japan and Germany. Data for the United States relate to the population 16 years of age and over. The lower age limits used by other countries vary and Sweden imposes an upper age limit of 64 (prior to 1986, the upper age limit was 74). The statistics adjusted to U.S. concepts have been adapted, insofar as possible, to the age at which compulsory schooling ends in each country and the Swedish statistics have been adjusted to include persons older than the upper age limit. An exception to this rule is that the Canadian statistics for 1976 onward are adjusted to cover ages 16 and over, whereas the age at which compulsory schooling ends remains at 15. The following tabulation shows the lower age limits for the published and adjusted statistics:

Country	As published	Adjusted	Country	As published	Adjusted
United States	16	16	Italy		
Canada			1959-92	14	14
1959-65	14	15	1993-	15	15
1966-75	15	15	Netherlands		
1976-	15	16	1973-74	13	14
Australia	15	15	1975-91	14	15
Japan	15	15	1992-	15	15
France			Sweden	16	16
1959-70	14	16	United Kingdom		
1971-	15	16	1959-72	15	15
Germany	14	15	1973-	16	16

OTHER COMPARATIVE SERIES: Three organizations compile internationally "comparable" monthly and annual series of unemployment rates for groups of developed countries. The BLS series, shown in this compendium, provide unemployment rates adjusted to U.S. concepts, insofar as possible. The Organization for Economic Cooperation and Development (OECD) publishes "Standardized Unemployment Rates" (SURS) for 24 member countries (see OECD, Quarterly Labor Force Statistics, Appendix Section). The SURS are adjusted to International Labor Office (ILO) concepts which are more general than U.S. concepts. The third organization, the Statistical Office of the European Union (EUROSTAT), publishes comparable unemployment rates for European Union countries based on their own specific interpretation of ILO concepts. Since 1992 (1993 for Italy), these concepts are close to U.S. concepts, but there are some differences. Beginning in Autumn 1996, the OECD adopted the comparable unemployment rates produced by EUROSTAT for the European Union countries, and OECD has revised their historical series as well to be in accord with EUROSTAT. OECD notes that the EUROSTAT rates are based on slightly different data and methodology compared with the former SURS calculated by the OECD. Table 10 compares the unemployment rates published by these three organizations. The OECD and EUROSTAT rates are now identical.

ACKNOWLEDGMENT: Data used in this compendium of labor statistics come mainly from national statistical sources but also from the OECD and EUROSTAT.